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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/031,215 | 05/21/2003 | Malcolm Timothy Frost | RR-497 PCT/US | 2466 |
| 20427 | 7590 | 10/28/2004 | EXAMINER | |
| RODMAN RODMAN 7 SOUTH BROADWAY WHITE PLAINS, NY 10601 | | | LAWRENCE JR, FRANK M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1724 | |

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,215

Applicant(s)

FROST ET AL.

Examiner

Frank M. Lawrence

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Specification

1. Applicant is requested to amend the specification by inserting a claim of priority to the international application as the first sentence.
2. The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973). This objection refers to the incorporations of British and Australian patents in lines 21-22 of page 2.

Information Disclosure Statement

3. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Young (5,215,674).
6. Young '674 teaches a solution of ammonia and a coalescing additive such as an alcohol or ethylene glycol stored within a vessel that is to be shipped for industrial or agricultural uses (col. 1, lines 13-19, col. 2, lines 4-22, col. 3, line 34 to col. 4, line 15).
7. Claims 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Gettert et al. (4,120,667).
8. Gettert et al. '667 teach a process for recovering ammonia from an alcohol/ammonia solution, comprising heating the solution to desorb ammonia in a stripping column (see col. 2, lines 38-58, col. 3, lines 23-35, col. 5, lines 9-38).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-7 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. (2,855,278) in view of Eimer et al. (5,230,877).

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11. Adams et al. '278 disclose a process for storing ammonia in aqueous solution, comprising absorbing ammonia into water to form a solution in an absorber at 10-14 psia (gas scrubber 40), holding the solution in a reservoir (37) at ambient temperature and pressure, recovering ammonia from the solution using distillation (heating) (see figure, col. 1, lines 15-46, col. 2, lines 17-46, col. 3, lines 45-46, col. 4, lines 41-49, col. 6, lines 43-57). The temperature in the absorber is lowered to achieve higher ammonia absorption, therefore the solution is saturated at the temperature (col. 7, lines 33-46). The instant claims differ from the disclosure of Adams et al. '278 in that the absorbent is an alcohol, particularly an ammoniation alcohol.

12. Eimer et al. '877 disclose a method for absorbing ammonia from a gas mixture by using diethylene glycol as an absorbent instead of water. It would have been obvious to one having ordinary skill in the art at the time of the invention to use diethylene glycol as the absorbent instead of water in the Adams et al. '278 system in order to provide an absorbent that allows a higher and more economical recovery of ammonia while having low volatility, high stability, non corrosive, and inexpensive (see Eimer et al. '877, col. 2, line 23 to col. 3, line 14).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference to Karwat (4,522,638) discloses an ammonia scrubbing process.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank M. Lawrence
Primary Examiner
Art Unit 1724

Frank Lawrence
10-5-04

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